

ENVIRONMENTAL NEWS



Newsletter of the N.H. Department of Environmental Services

January - February 2013

COMMISSIONER'S COLUMN

Environmental Vigilance Means Economic Certainty in New Hampshire

As we start a new year, 2013, the Department of Environmental Services moves on from celebrating its 25th anniversary in 2012, to starting work on another chapter to ensure that New Hampshire's citizens and visitors will have clean air to breathe, healthy water to drink and clean lands on which to live and play and grow our food. We are also poised to begin work with a new governor and a new legislature. Under Governor Lynch's unprecedented eight years in office, we feel that we achieved his goal of leaving a better environment to future generations than was left to us. Fundamentally, this is the mission of DES, and there can be no doubt that over the past eight years we have done exactly that - our environment in so many ways is better today than it was eight years ago.

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DES receives beautiful hand carved sculpture made from different species of wood grown in NH. For more about this gift, see page 7.

DES IN ACTION



Tugboat sinks in Piscatqua River

On October 24th at about 11:45 am, the Benjamin Bailey, a 55-foot long tugboat owned by Riverside and Pickering Marine, sank in the Piscatqua River in the vicinity of the Memorial Bridge project. The cause of the sinking is still under investigation by the U.S. Coast Guard. At the time of the incident the tug contained an estimated 750 gallons of diesel fuel.

Swift currents, and the dangerous conditions they present, slowed recovery efforts. Divers were only able to work on the vessel during slack tide, in daylight presenting only a 40 minute window of opportunity twice each day. Other contributing factors to the recovery included the lack of the necessary resources locally for the vessel recovery and the inexperience of the vessel owners and contractors involved in the recovery of a vessel of this size.

The vessel was ultimately recovered on October 28th with the aid of two wreckers and a crane. During the recovery operation there was a release of diesel fuel which was addressed by NHDES, and Clean Harbors, Inc. ■



Commissioner's Column

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The scope of our responsibilities, however, go far beyond air, water and waste management to include, for example, managing the state's dams, actively protecting public safety, before during and after natural and man-made disasters, ensuring safe conditions for harvesting shellfish, cleaning up man-made contamination in the state's groundwater, assisting communities in covering the cost of constructing and upgrading drinking water and wastewater systems, and working with a wide range of partners to address the growing and serious challenges posed by a changing climate.

To continue to serve the people of New Hampshire in these ways, the state will need to invest more in the DES Dam Maintenance Fund, which has seen its revenue reduced by 50% to 70% annually and has been operating at a deficit. This investment will maintain public safety and the economic value of our lakes for the future. Additionally, more resources are needed for state aid grants to assist our municipalities that are updating their water supplies, wastewater plants and completing landfill closures. There is currently a backlog of completed projects for which the state has not been able to provide support under the state aid grant program that includes some 100 wastewater projects, 20 water supply projects and seven landfill closures across 48 communities.

Each and every program that DES administers has very real and direct economic benefits to the people of New Hampshire, for a healthy environment is arguably a central element of what defines and sustains the people of New Hampshire and their livelihoods. New Hampshire's employers recognize that clean air, water and land are key factors that help to attract and retain desirable employees, and that a well-managed natural resource base provides the assurance that they will have abundant natural resources, including water and forest products, to support their businesses over the long-term. And our tourism trade is absolutely dependent upon there being plentiful, clean water in our lakes, ponds and rivers, healthy air to breathe, and beautiful, scenic vistas for all to enjoy.

One of the primary ways that DES assures a healthy environment is through its permitting processes. Understanding that timeliness and predictability are critical to any permitting program, we at DES have focused considerable efforts and attention to make sure that our permitting processes are user friendly, timely and as efficient as possible. We have substantially reduced application review times in many of our programs, and we work closely with businesses and non-profits seeking to build or expand facilities in New Hampshire to make the permitting process as seamless and understandable as possible



Mt. Washington in Winter

sible so that they can create new jobs here in the Granite State. In 2013, DES intends to continue to work with the NH Legislature to enact Integrated Development Project Permitting to further improve our customer service.

DES has made great strides in enhancing New Hampshire's quality of life, and we look forward to continuing these efforts in partnership with our new legislature and governor because there is still much more to be done. In truth, our work will never be done, for constant vigilance and efforts are necessary to ensure that our air, waters and lands stay clean and actually get cleaner for all of our residents and for all the ways that a healthy environment contributes to a strong economy here in New Hampshire. ■

ENVIRONMENTAL NEWS

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The Forgotten Infrastructure: Municipal Stormwater Needs Exceed \$271 Million

DES has new numbers just off the presses! Statewide capital costs associated with stormwater infrastructure needs in New Hampshire are \$271,676,710. This is up from \$69 million in 2008. These costs were determined for the EPA Clean Watersheds Needs Survey (CWNS) using rigorous data collection protocols.

The data from the CWNS are collected by the states for EPA every four years to determine capital funding needs for stormwater and wastewater infrastructure. The numbers are used in a report to Congress that informs national and state decision makers about the financial challenges municipalities face. For example, the information will be used to allocate federal funds for New Hampshire's Clean Water State Revolving Fund program.

New Hampshire municipalities are constantly struggling to pay for the management of their stormwater programs. Flooding and polluted stormwater runoff impacts to our local waterbodies are growing concerns for municipal staff, businesses and residents. Federal permit requirements and increasing development pressures are constantly adding to the burden of keeping our waters clean.

What is included in the survey?

The stormwater portion of the survey includes capital needs and costs for stormwater projects or stormwater-related activities planned over the next 20 years. Needs have to be listed in an official document (e.g., Capital Improvement Plan, federal or state grant applications, or other EPA-approved official planning documents.) Needs are only eligible if a water quality benefit can be documented.

Eligible projects must address the Stormwater Management Program activities associated with:

- Conveying stormwater via pipes, inlets, road-side ditches, culverts, and other similar mechanisms

- Treating stormwater with wet ponds, dry ponds, manufactured devices, and other similar means
- Low impact development and green infrastructure, such as bioretention, constructed wetlands, permeable pavement, rain gardens, green roofs, cisterns, vegetated swales, etc.
- Activities associated with implementing a stormwater management program, such as: tracking systems and equipment (e.g., street sweepers, vacuum trucks, etc.)

New Hampshire used an EPA-approved Innovative Method to extrapolate available data collected to reflect the needs of all New Hampshire municipalities. DES obtained data from 21% (49) of the municipalities to create a per acre rate to extrapolate to the remaining 185 municipalities.

It is important to note that projects associated with stormwater flooding or erosion, resulting in sediment to rivers and streams, are not eligible for this survey. Because municipalities have additional costs associated with addressing these potential pollutants (e.g., culvert replacements, bank restoration, bridge abutment work,

etc.), DES staff are recording additional data to document those needs separately.

While wastewater costs have been recorded for several decades, the collection of stormwater costs is relatively new for the CWNS. The data are not always readily available. Many municipalities lump stormwater costs in with road work, sewer line installation, or other construction costs. DES Watershed Assistance staff and Intern, Lisa Loosigian, performed the stormwater data treasure hunt for New Hampshire. Municipal DPW and administrative staff then reviewed and analyzed the paperwork to provide the needed documentation, for which DES wishes to extend a big "Thank You!" to all contributing communities. Without the support of the municipalities, it would not have been possible to complete the survey.

See next month's DES Newsletter for the official wastewater needs for 2012. For more information about EPA Clean Watershed Needs Survey visit: <http://water.epa.gov/scitech/datatit/databases/cwns/index.cfm>. The official 2012 stormwater and wastewater data will be on the website soon. For questions about the New Hampshire Stormwater Needs, contact Barbara McMillan at barbara.mcmillan@des.nh.gov or 271-7889. ■



Rain garden being installed by the Portsmouth DPW



RECOGNIZING EXCELLENCE

Deborah S. Loiselle - 2012 DES Employee of the Year



Deb Loiselle, second from left, was joined by her family and Commissioner Burack at the DES Employee Recognition Award Ceremony.

Deb Loiselle, River Restoration Coordinator for the Water Division excels in every facet of her duties, leads by example, and continues to inspire DES colleagues and project partners from federal, state, municipal, and private sectors with her dedication, leadership, integrity, initiative, perseverance, and relentless commitment to public service.

It is broadly recognized that dam removals are some of the most difficult and controversial projects to undertake. Issues to be addressed include historic resource impacts, contaminated sediments, flooding issues, ecological risk, infrastructure protection, and cultural and social considerations, to name but a few. Yet, year after year, Deb Loiselle demonstrates her unique ability to conceptualize, develop and manage an average of fifteen to twenty active projects each year. This past year was one of the most demanding for the Rivers Restoration Program and Deb rose to the challenge, represented the Department in the best possible light, and continued to deliver exemplary customer service at all times.

In the process of restoring rivers through dam removal, public involvement is essential every step of the way. Misinformation can lead to volatile exchanges, accusatory remarks toward government, and personal attacks. Emotions sometimes escalate to the point that a police presence is often mandatory at public meetings. During these heated debates, Deb continues to represent DES with a fair, balanced approach, listening to all sides while facilitating the decision-making process and remaining patient and professional at all times. Her calm and balanced demeanor has been a

major factor in the success of these projects. While not every interested party might agree on a final decision regarding a dam removal project, they know that they have been heard and respected when Deb is involved.

Deb continued to Chair the New Hampshire River Restoration Task Force in 2012 in the pursuit of improved efficiency among state and federal agencies, nonprofit organizations, municipalities, and other stakeholders. Amazingly, she also represented DES at a minimum of fifteen speaking engagements before a wide variety of audiences, providing a proactive approach to dam removal and river restoration. Her presentations this year ranged from guest lecturing at the University of New Hampshire, at high schools and grade schools, and serving as a featured speaker at a Gulf of Maine Council Working Group meeting and at The New Hampshire Joint Engineering Societies Conference.

Deb is a proven leader with a true public service ethic, someone who knows how to grow and sustain professional and personal relationships, and an inspiration to all DES employees and those outside of the agency fortunate enough to work closely with Deb. She is an invaluable member of the DES family. ■

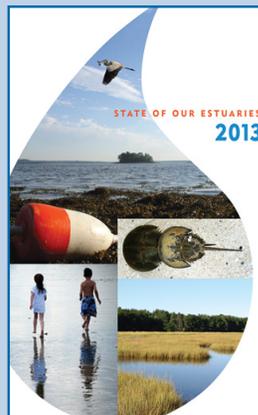
State of Our Estuaries Report Released

On December 7, 2012, the Piscataqua Region Estuaries Partnership (PREP) released the 2013 State of Our Estuaries Report. Two hundred and forty people attended the conference in Portsmouth, NH to launch the report.

PREP produces this condition and environmental trends report every three years in an effort to provide communities and citizens with an informed and comprehensive evaluation of what is being observed in the Great Bay Estuary and Hampton-Seabrook Harbor. The 2013 report presents an assessment of 22 key indicators of the health of the estuaries. The overall assessment shows that

there is reason to be concerned about the health of the estuaries, and that increased efforts to study and restore the estuaries are needed. It also shows that there are effective efforts that can be made now to begin to reverse trends of concern.

The report and conference materials are available from www.stateofourestuaries.org.



RECOGNIZING EXCELLENCE

2012 David S. Chase Memorial Award - Phillip R. Trowbridge

The 2012 David S. Chase Memorial Award for Outstanding Achievements in Science was awarded to Phillip R. Trowbridge. In his capacity as manager of the Water Quality Standards program within the Watershed Management Bureau, Phil has made significant scientific contributions to the understanding and protection of the surface waters of New Hampshire.

As part of his job, he has developed many innovative Total Maximum Daily Load (or TMDL) studies to restore polluted waters. An outstanding example is the State's first chloride TMDLs for several brooks that have elevated levels of salt due to the application of deicing chemicals. These studies have been integrally related to the expansion of Interstate 93. Based on what he learned preparing the chloride TMDLs, Phil developed a ground-breaking, relatively simple algorithm that can be used to create chloride TMDLs in any watershed. This peer-reviewed work was published in the *Journal of Environmental Science and Technology* in June 2010.

Phil also serves as the Coastal Scientist working with the Piscataqua Region Estuaries Partnership (PREP), for which he transformed data from a disjointed array of monitoring efforts into an efficient program with well-defined goals. The resultant environmental indicators are the envy of organizations across the country and a testament to his extraordinary analytical and statistical skills.

Phil is now working on a nonpoint source analysis of portions of the Great Bay estuary that are impaired by elevated nitrogen levels and are showing signs of eutrophication. His previous work in Great Bay supported the DES's nutrient impairment recommendations to EPA and contributed to the DES's heightened awareness of nutrient pollution in the region.

Because he is a very talented statistician, Phil is often called upon by others to review their work and to assist them with statistical analyses. Phil is a firm believer in the scientific process, and given the potential implications on stakeholders, much of his work has been the subject of intense scrutiny. Often this is by choice, as one of Phil's key practices to improve the quality of his work is to engage and trust others to critique his analyses. Beyond that, his work has been subjected to traditional peer review and questioning by experts from across the nation. This scrutiny has both improved the results of his work and validated their accuracy.

Most importantly, throughout these inquiries and all of



Phil Trowbridge (center) was joined by Governor Lynch and Commissioner Burack at the DES Employee Recognition Awards Ceremony.

his great work, Phil has demonstrated his professionalism, patience and humility - the true hallmarks of a great scientist. For all of these reasons, DES is pleased this year to present the David S. Chase Award for Outstanding Achievements in Science to Phillip R. Trowbridge. ■

Want to get the latest news about New Hampshire's Environment?

Click on this icon below



or at www.des.nh.gov receive DES press releases and publications.

Needle stick injuries pose a serious threat to solid waste operators because of the blood-borne diseases they can carry. An accidental stick from a needle in the trash can cost thousands of dollars in medical testing, even when tests are negative. DES is providing one roll of 100 labels to each municipal transfer station to help identify containers that contain medical sharps.



Proper disposal of sharps

IN THE SPIRIT OF GIVING

OPERATION SANTA CLAUS



DES elves load up the "sleigh"

Through the caring and generosity of DES employees, \$8,768 (or the equivalent of multiple gifts for 90 needy children across New Hampshire) was donated to the 2012 SEA Operation Santa Claus effort.

Capital Region Holiday Food Basket Program



DES Waste Management Director, Mike Wimsatt presents Maria Manus Painchaud of the Capital Region Food Program (CRFP) with a check for \$2,115. DES employees raised the money during their annual food drive activities. DES and other state agencies also donated over 5,100 food items to the CRFP for their Holiday Food Basket Program.



Make a Difference Day in the Opportunity Corridor

As part of this year's Make a Difference Day activities, volunteers from the DES Petroleum Remediation Program and WESTON Solutions, an environmental consulting firm, got together and constructed six raised beds at the new Friendly Kitchen property located in what is now known as "Opportunity Corridor". WESTON Solutions, supplied the labor, funding and donated gardening tools. Volunteers from DES's Petroleum Remediation Program provided the design, additional labor and hot soup for everyone.

The former industrial area of Concord where the Friendly Kitchen is now located used to be known as the Crud Corridor. The Rumford Energy property, which was heavily contaminated, was located in the middle of the corridor and is one of the properties targeted by the Concord Brownfields program. Initially a gas station, and later a bulk fuel oil facility, this blighted property had been vacant since 2007.



DES worked with a variety of property owners over two decades on cleaning up the Rumford Energy property. The extensive cleanup was made possible by reimbursement from the state's Oil Discharge and Disposal Cleanup Fund. By the time the Friendly Kitchen looked into the property, site cleanup was complete, but questions remained, so DES completed a Phase II investigation using Brownfields' funding. The report and *pro bono* work by area environmental professionals helped the Friendly Kitchen feel confident enough to purchase the property.

The Friendly Kitchen's Capital Campaign was launched in August 2012 and successfully raised money for rebuilding its operations. The redevelopment project also received substantial funding from the Lincoln Foundation. The soup kitchen now has a new building on the Rumford Energy property with room to serve 120 people.

The Friendly Kitchen's mission for over 30 years has been to make sure that no one goes hungry in the Concord area. Our goal on that day was to continue to make a difference in the Opportunity Corridor and to assist the Friendly Kitchen with its dream of growing produce and herbs for use in its kitchen. ■



Restoring Power with Hybrid-Electric Vehicles

As Hurricane Sandy passed through New Hampshire, about 200,000 households lost power leaving some residents in the dark for several days. Two New Hampshire electrical utilities used their hybrid-electric trucks to repair damage and restore power to their customers.

The vehicles, two line trucks owned by Public Service of New Hampshire (PSNH) and one owned by New Hampshire Electric Cooperative, were funded in part with a grant from the Granite State Clean Cities Coalition (GSCCC). GSCCC, a public/private partnership hosted by DES, seeks to advance vehicle technology and fuel solutions that will reduce the use of imported petroleum and help improve air pollution in the state.

Large auxiliary batteries assist the truck engine when driving and allow the bucket, boom, and other equipment to be quietly operated with the engine off when the vehicle is parked. As the batteries run low, the engine starts up long enough to charge the batteries while continuing to provide power to the equipment. The start and stop of the vehicle engine is automatic, regulated by an on-board computer and battery monitoring system.

Restoring power is a challenging process involving clearing trees, repairing or replacing poles and replacing lines.



Hybrid vehicles reduce both air pollution and the use of imported petroleum.

The ability to run the boom and other applications without the idling assures quiet when line crews are working through the night to bring residents' power back online. Hybrid-electric trucks produce less noise and fewer emissions because they idle less frequently. Both utilities have seen a 20 to 30 percent improvement in fuel economy, which reduces their fuel use costs and saves money.

Bolstered by the success of their hybrid-electric line trucks, PSNH also purchased a medium duty hybrid-electric truck which services lines from the residence to the utility pole. The hybrid-electric's quiet technology is appreciated when the line worker is working close to the residence. The hybrid-electric truck has been so effective for this task that PSNH has five more of these vehicles on order.

If you would like to learn more about hybrid-electric vehicles or other fuel and vehicle technologies, visit the GSCCC website at www.granitestatecleancities.nh.gov. ■

One-of-a-Kind Gift



L to R: Tom Wagner (Forest Supervisor), Dee Hines (Deputy Forest Supervisor), Vicki Quiram, Tom Burack, Deb Loiselle and Bill Dauer (Forest Engineer) accept a commemorative woodcut to honor DES's 25th Anniversary.

Representatives from the White Mountain National Forest presented Commissioner Burack and Assistant Commissioner Quiram with a special gift in honor of the NHDES 25th Anniversary. Tom Wagner praised Commissioner Burack and Assistant Commissioner Quiram for the agency's dedication and commitment to restore and enhance New Hampshire's natural resources. The White Mountain National Forest recently celebrated its 100th anniversary. Collectively the agencies have over 125 years of environmental stewardship and are committed to working together for many more years to further enhance the environment for future generations. The honorary one-of-a-kind gift was handcrafted by Bill Dauer. ■

2012 Longevity Awards

40 YEARS

Donald A. Corliss

35 YEARS

Robert C. Fay

30 YEARS

Frank D. Richardson

25 YEARS

Stephen H. Roberts

Gail M. Timmins

Dori A. Wiggan

Laura M. Cook

Steve N. Doyon

Joyce P. Bledsoe

Stephanie Larson

John F. Liptak

Richard P. Brock, Sr.

Thomas J. Fazzina

20 YEARS

Deborah Mayo

Jacquie J. Colburn

Stephen C. Landry

David C. Bowen

Robert A. Tardif

Dennis A. Pinski

Marc S. Trendell

Peter L. Beblowski

William "Chris" Nash

Kent R. Finemore

Debra L. Libby

Spruce C. Wheelock

15 YEARS

Theodore E. Diers

Daniel D. Dudley

Jeffrey T. Underhill

Darlene C. Forst

Gary D. Milbury, Jr.

Christopher E. Locke

Johnna M. McKenna

15 YEARS (Continued)

David A. Price

Beth L. Malcolm

David M. Degler

Amy P. Smagula

Richard J. De Seve

Pamela G. Monroe

Mark Ledgard

Sharon L. Rivard

Anthony J. Brown

Tammy A. Calligandes

10 YEARS

Stanley J. Mitchell

Timothy C. Carney

Jennifer L. Drociak

Jillian E. McCarthy

Jennifer A. Marts

Sara E. Steiner

Anne S. Bailey

Timothy L. Nowack

Donald E. Watson

Bronislav Karnauk

Howard K. Dubois

Muriel S. Lajoie

Robert B. Bishop

Jeffrey D. Blecharczyk

Elizabeth "Molly" Stark

Matthew A. Jones

Jeffrey D. Marcoux



DES staff say thank you and farewell to Governor Lynch at the DES annual award ceremony.

Do You Heat Your Home With Wood?

Keep your home and family safe by following these tips:

- Burn the right wood - Use only seasoned hardwood.
- Use the right stove - It's best to use an EPA certified stove, they burn less wood and provide more heat.
- Burn the right way - Be sure to clean your stove and pipes each year. Maintain a bright, hot fire and do not let it smolder.

Burning wood safely and efficiently reduces air pollution and saves money.

For more information see: www.epa.gov/burnwise



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